

Table II-2. Surface Area Estimates, in Hectares, of Three Sea Level Controlled Wetland Types (From Wilson 1962)

County	Tidal salt marsh(1)	Nontidal brackish marsh(2)	Nontidal freshwater marsh(3)	Alterations Hectares	1970-84 No. Permits
Pamlico Sound					
Carteret	4,047	15,621	0	20	595
Pamlico	0	6,071	0	310	210
Beaufort	0	182	1,639	30	240
Hyde	648	12,101	1,376	35	95
Dare	202	6,273	2,104	60	325
Total	4,897	40,247	5,119		
Albemarle-Currituck					
Tyrrell	0	0	223	1	50
Chowan	0	0	121	1	60
Camden	0	0	648	5	35
Currituck	0	0	9,551	120	140
Total	0	0	10,542		

Original nomenclature used in Wilson was: (1) regularly flooded marsh, (2) irregularly flooded salt marsh, (3) shallow fresh marsh. (4) Estimated from bar graph in Stockton and Richardson (1987).

development and settlement in the coastal zone of North Carolina suggest this issue will become critical for those with coastal land holdings.

Because of the sparsity of information on fringe wetlands of the type that occur in the Albemarle and Pamlico sounds, management and protection of these areas have had to rely on management policies developed for wetlands that differ from them hydrologically and geomorphologically. This situation places the resource in a potentially vulnerable position if inappropriate management techniques are applied.

Typical responses of society to sea level rise are building levees, dikes, and bulkheads to thwart the intrusion of brackish water or deter the loss of land by coastal erosion (Carter 1987). Titus (1987) suggests that society's response to sea level rise depends upon the economic value and dedicated use of the land threatened. Wetlands will not be maintained, however, if barriers to their migration are constructed (Titus 1988).

Sea level controlled wetlands are discussed below in order of their proximity to oceanic and tidal influences: (1) tidal salt marsh, (2) nontidal brackish marsh, (3) fringe swamps, and (4) nontidal freshwater marshes.